# Ash Grove Cement Co. SEATTLE PLANT Semi Annual NSPS Report

# Opacity COMS Summary Report for 40 CFR 60.7(d)

Reporting period dates: July 1, 2006- December 31, 2006

Company: Ash Grove Cement Company, 3801 E. Marginal Way So. Seattle, WA 98134

Process unit(s) description: The in-line kiln/raw mill system includes an ID fan, the main baghouse dust collector, the Raw Mill, preheater/precalciner, and rotary kiln. The system converts dry raw materials prepared in the raw mill into cement clinker by heating it to the point of incipient infusion in the preheater/ precalciner and kiln. New chemical compounds are formed in the clinkering process that produces the hydraulic properties of portland cement. The system is heated by fossil fuels that are combusted at the lower or clinker discharge end of the inclined rotary kiln and in the precalciner and tire derived fuel introduced to the system at in the precalciner. The flow of combustion products is countercurrent to the flow of raw materials in the kiln.

Emission limits: 20% @ 6 minute average

Monitor manufacturer and model no: Lear Siegler Dynatron 1100M

Date of latest COMS Certification or Audit: 10/10/06

Total source-operating time in reporting period: 3734 Hours

Include with the Emission Data Summary1:

1. The duration of excess emissions in reporting period that was due to:

(a) Startup/Shutdown:	0
(b) Control equipment problems:	9
(c) Process problems	0
(d) Other known causes:	3
(e) Unknown causes:	2

- 2. The total duration of excess emission in minutes: 840 minutes
- 3. [Total duration of excess emissions]/[Total source operating time]\* $(100) = 0.37 \%^2$

Include with the COMS Performance Summary1:

1. The CMS downtime in reporting period due to:

(a) Monitor equipment Malfunctions:	0
(b) Non-Monitor equipment Malfunctions:	0
(c) Quality assurance calibration	3
(d) Other known causes:	0
(e) Unknown causes:	

- 2. The Total COMS Downtime in minutes: 66900 minutes
- 3. [Total COMS Downtime]/[Total operating time]\*(100) = 29.8 %<sup>2</sup>

Describe any changes since last quarter in COMS, process or controls: None

Certify that the information attained in the report is true, accurate, and complete.

Gerald J. Brown EHS Manager

Name and Signature (Title) of the responsible official and Date

- 1. For Opacity, record all times in minutes.
- 2. For the reporting period: If the total duration of excess emissions is ≥ 1% or the total CMS downtime is ≥ 5% of the total operating time, both the summary report form and the excess emission report described in 60.7(c) shall be submitted.

#### **Excess Emission Report**

### 40 CFR 60.7(c)

- (1) The magnitude of excess emissions computed in accordance with § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

Opacity

Augus	August 2006 Process Operating Time (minutes): 22320		
		6 Min	The problem was traced to compartment #3 of the Main
<b>Date</b>	<u>Time</u>	<b>Average</b>	baghouse. The production crew isolated this compartment and
8/1	07:09 - 07:12	27%	later inspection by maintenance showed that a collector bag had
ora sensar	15:45 - 15:48	53%	ruptured. This bag was replaced
8/25	15:21 - 15:24	21%	The investigation suspected the origin of the opacity was in
	15:24 - 15::27	21%	compartment #2 and it was taken off line. Interior inspection
		N N	discovered and replaced a ruptured bag. This bag was replaced.
8/28	17:54 - 17:57	21%	An investigation into this reading could not find a cause. Opacity
			returned to within permitted limits before a cause could be
			determined and without any corrective action being taken
8/31	08:51-08:57	99%	The investigation suspected the origin of the opacity was in
	09:00 -09:03	45%	compartment #3 and it was taken off line. Interior inspection
			discovered and replaced a ruptured bag.

Septer	September 2006 Process Operating Time (minutes): 35220		
		6 Min	Maintenance inspection determined both lenses, transceiver unit
<b>Date</b>	<u>Time</u>	<u>Average</u>	and window were dirty. The unit was cleaned and an off line
09/21	07:57 - 08:00	28%	calibration was performed but the unit continued to be unstable.
	08:00 - 08:03	26%	Further diagnostics failed to indicate the cause, the system was
	11:45 - 11:48	31%	put back on line and the control room was requested to check the
	14:45 – 14:48	21%	baghouse. A check of the baghouse indicated a problem in compartment #2. An interior inspection found one broken bag that was replaced.

October 2006 Process Operating Time (minutes): 44100			
<u>Date</u> 10/10	<u>Time</u> 19:24 – 19:27	<u>Average</u>	The cause of the opacity was found Main baghouse Compartment #3. This compartment was isolated and the opacity returned to within normal limits. It was determined that a bag had failed. The bag was replaced and the compartment returned to service.
10/23	20:30 - 20:33	25%	No cause was found. Opacity reduced without intervention

November 2006 Process Operating Time (minutes): 41580			
		6 Min	Investigation suspected a problem within compartment #5 of the
<b>Date</b>	<u>Time</u>	Average	main baghouse. The compartment was taken off line and an
		3	interior inspection was conducted. This inspection found one
11/12	13:48- 13:51	86%	broken bag. The bag was replaced and the compartment was
			returned to operation.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

Date	Time	Nature of the system repairs or adjustments.
7/6/06	08:00 - 12:00	Lamp replaced
7/9/06	00:00 - 09:00	High reading trouble shooting - Suspect problems experienced with a
		process fan was the cause
7/9/06	16:00 -	High reading experienced - Re zero the transceiver under clear stack
7/10/06	05:00	conditions.
0/02/06	T 10.00	
9/03/06	18:00 -	Trouble shooting cause for high readings performed off line calibration,
9/04/06	13:00	adjusted gain, performed zero and span calibration
9/06/06	13:00 – 14:00	Trouble shooting cause for drift. Performed Manual calibration
9/2.9/06	10:00 – 11:00	Maintenance cleaning of monitor windows, adjusted gain, performed offline calibration
10/25/04	1.000	
10/25/06	10:00 -	Transceiver Communication board failed in monitor. Ordered a replacement
10/31/06	14:00	but received a replacement CRU Communication board. Reordered the
		correct part and installed but readings remained unstable.
11/01/06	06:00	Trouble shooting cause for high readings. Performed zero and span
11/02/06	02:00	calibration. Performed clear stack calibration.
11/15/06	13:00	Zero and span continued to drift. Trouble shooting cause. Weather
11/16/06	14:00	interrupted power during off line calibration test and caused delay in
		diagnosing monitor malfunction.
11/17/06	10:00 - 13:00	The monitor went out of calibration and was taken out of service. Performed
		diagnostic, zero and span and off line calibration performed.
11/20/03	09:00 - 13:00	The monitor was taken out of service because it was discovered that it was
		incorrectly performing opacity averaging.
11/21/06	04:00-	The Communication Board replaced on 10/31 failed and it was determined to
11/30/06	315 300 31	be a different edition. The manufacturer announced that they were no longer
	100	supporting that model of opacity monitor and that the needed replacement
		part was no longer available. A replacement opacity monitor was ordered.
12/01/06		Inoperative opacity monitor due to malfunction. A replacement monitor on
12/31/06		order.
12/31/00		order.

## ASH GROVE CEMENT COMPANY



"WESTERN REGION"

January 26, 2007

EPA Region 10 Attn: Office of Air Quality 1200 Sixth Avenue Seattle, Washington 98101

VIA Certified U.S. Mail No.7004 2510 0005 3637 0722

Please find enclosed the Semi-Annual NSPS Report for July – December 2006 submitted for Ash Grove Cement Co. 3801 East Marginal Way So. Seattle WA. 98134.

Yours truly,

Gerald J. Brown EHS Manager

Enclosure: